CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 86-74

WASTE DISCHARGE REQUIREMENTS FOR:

JONES CHEMICALS, INC.
MILPITAS FACILITY
MILPITAS
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Jones Chemicals, Inc. (hereinafter called the discharger) operates a chemical storage and distribution facility located at 985 Montague Expressway, between Routes 17 and 680, in the City of Milpitas, Santa Clara County.

2. The discharger receives chlorine gas, sulfur dioxide, anhydrous ammonia, various acids and bases and trichlorethane by rail or tank truck and repackages these chemicals into cylinders or drums. The discharger also manufactures sodium hypochlorite and aqua-ammonia and ships these chemicals in tank trucks or drums.

3. Waste waters generated by a drum rinsing operation are neutralized and discharged to the municipal sanitary sewer system. Sanitary wastes also are discharged to the sewer system.

4. Subsurface investigation by the discharger shows that groundwaters beneath the site and beyond the site boundaries have been contaminated by organic solvents, such as trichloroethylene (TCE), 1,1,1-trichloroethane (TCA), and perchloroethylene (PCE). The apparent cause of said contamination was an explosion of a solvent tank that resulted in discharge of as much as 4000 gallons of organic solvents to the ground and to adjacent Berryessa Creek.

5. As of April 1985, the solvent contamination extended horizontally a distance of approximately 1200 feet downgradient beyond the property boundary and vertically to a depth of 115 feet. Chemicals such as trichloroethene and trichloroethane, which are EPA priority pollutants, have been detected in groundwater samples at concentrations exceeding 200,000 parts per billion.

6. The groundwater pollution from the facility is of particular concern because of the high toxicity and high concentrations of chemicals, and because of the potential for the continued migration of pollutants to usable groundwaters. Wells within the vicinity of the site draw water for municipal supply from depths of approximately 200 feet or greater.

7. In the fall of 1984, the discharger began interim extraction of polluted groundwaters from within the site boundaries in an attempt to contain and clean up the areas of highest contamination. Currently there is between 20,000 to 50,000 gallons per day of polluted groundwater which is extracted and treated by airstripping and carbon adsorption, followed by discharge to Berryessa Creek.

8. Further investigative and remedial action is necessary to prevent the continued migration of pollutants to unaffected groundwaters in a manner which could adversely affect existing and potential beneficial uses.

9. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for groundwater.

10. The existing and potential beneficial uses of the groundwater underlying the facility include:

    a. Municipal Water Supply
    b. Domestic Water Supply
    c. Agricultural Water Supply
    d. Industrial Service and Process Water Supply

11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

12. This project constitutes a minor modification to land and such activity is thereby exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with Section 15304 of the Resources Agency Guidelines.

13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Jones Chemicals, Milpitas Facility, Milpitas, in order to meet the provisions contained in Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. The discharge of waste or hazardous materials in a manner which will degrade the water quality or adversely affect beneficial uses of the groundwaters of the State is prohibited.

2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup, which will cause significant adverse migration of pollutants are prohibited.

B. Specifications

1. The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The discharger shall conduct monitoring activities as needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution in and contiguous to the zone of known pollution. Should monitoring results show evidence of plume migration, additional plume characterization shall be required.

C. Provisions

1. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program approved by the Executive Officer.

2. The discharger shall comply with Prohibitions A.1, A.2, and A.3 and Specifications B.1 and B.2 in accordance with the following task and time schedule:

Task	Completion Date
a. Complete the installation of necessary hydraulic control structures and treatment facilities to contain and cleanup the offsite portions of the pollutant plume.	December 15, 1986
b. Commence containment and cleanup of offsite portions of the pollutant plume.	December 30, 1986
c. Submit a technical report acceptable to the Executive Officer which describes the work completed to accomplish the tasks described in Provision C.2.a and which describes measures taken and proposed to be taken to evaluate and monitor the adequacy of the system to contain and clean up the polluted groundwaters.	January 15, 1987
d. Submit a technical report acceptable to the Executive Officer which evaluates the effectiveness of the hydraulic containment system. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zones of the wells, establishment of the cones of depression by field measurements, and presentation of monitoring data from monitoring wells. Specific modifications to the system and an implementation time schedule shall be proposed in the event that the system is demonstrated not to be effective in containing and cleaning up the pollutant plume.	April 15, 1987

3. Brief letter reports summarizing progress and assessing ability to meet future compliance dates shall be submitted on a monthly basis.

4. Quarterly technical progress reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted to the Board commencing on November 3, 1986. These reports shall include, but need not be limited to, updated water table and piezometric surface contour maps for all affected water bearing zones, cross-sectional geological maps describing the hydrogeologic setting of the site, and appropriately scaled and detailed base maps showing the location of all monitoring and extraction wells, and identifying adjacent facilities and structures. All hydrogeologic plans, specifications, reports, and documents shall be signed and/or stamped with the seal of a registered geologist, engineering geologist, or professional engineer.

5. Copies of all correspondence, reports, and documents submitted to the Board pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be provided to the following agencies:

   a. Santa Clara Valley Water District
   b. Santa Clara County Health Department
   c. State Department of Health Services/TSCD
   d. City of Milpitas

6. In the event of non-compliance with Provisions C.2, C.3 and C.4 of this Order, the dischargers shall submit written notification to the Regional Board office within two weeks which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on compliance with the remaining requirements of this Order.

7. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.

8. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:

   a. Entry upon premises where any pollution source exists, or may potentially exist, or in which any required records are kept;

   b. Access at reasonable times to copy any records required to be kept under terms and conditions of this Order;

   c. Inspection of any monitoring equipment or methods required by this Order.

   d. Sampling of any groundwater or soil which is accessible, or may become accessible as part of any investigation or remedial action program, to the discharger.

9. The discharger shall file a report on any material changes in the nature, quantity, or transport of polluted groundwater associated with the pollution described in this Order.

10. The discharger shall maintain in good working order and operate, as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

11. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on September 17, 1986.

ROGER B. JAMES
Executive Officer